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CLAIMS

1. A method of cutting an object to be processed, the method comprising:

5 a starting point region for cutting forming step of irradiating a wafer-like object to be processed with laser light while positioning a light-converging point therewithin, so as to form a modified region due to multiphoton absorption within the object, and causing the modified region to form a starting point region for
10 cutting, deviated from a center position of the object in a thickness direction thereof toward one end face of the object, along a line along which the object should be cut in the object; and

15 a pressing step of pressing the object from the other end face side of the object.

2. A method of cutting an object to be processed according to claim 1, wherein the object is pressed along the line along which the object should be cut in the pressing step.

20 3. A method of cutting an object to be processed according to claim 2, wherein positional data of the line along which the object should be cut with respect to the object is stored in the starting point region for cutting forming step; and

25 wherein the object is pressed along the line along which the object should be cut according to the

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positional data in the pressing step.

4. A method of cutting an object to be processed, the method comprising:

5 a starting point region for cutting forming step
of irradiating a wafer-like object to be processed with
laser light while positioning a light-converging point
within the object under a condition with a peak power
density of at least 1×10^8 (W/cm²) at the light-
converging point and a pulse width of 1 μ s or less, so
10 as to form a modified region including a crack region
within the object, and causing the modified region to
form a starting point region for cutting, deviated from
a center position of the object in a thickness
direction thereof toward one end face of the object,
15 along a line along which the object should be cut in
the object; and

a pressing step of pressing the object from the
other end face side of the object.

20 5. A method of cutting an object to be
processed, the method comprising:

a starting point region for cutting forming step
of irradiating a wafer-like object to be processed with
laser light while positioning a light-converging point
within the object under a condition with a peak power
density of at least 1×10^8 (W/cm²) at the light-
25 converging point and a pulse width of 1 μ s or less, so

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as to form a modified region including a molten processed region within the object, and causing the modified region to form a starting point region for cutting, deviated from a center position of the object in a thickness direction thereof toward one end face of the object, along a line along which the object should be cut in the object; and

a pressing step of pressing the object from the other end face side of the object.

6. A method of cutting an object to be processed, the method comprising:

a starting point region for cutting forming step of irradiating a wafer-like object to be processed with laser light while positioning a light-converging point within the object under a condition with a peak power density of at least 1×10^8 (W/cm²) at the light-converging point and a pulse width of 1 ns or less, so as to form a modified region including a refractive index change region which is a region with a changed refractive index within the object, and causing the modified region to form a starting point region for cutting, deviated from a center position of the object in a thickness direction thereof toward one end face of the object, along a line along which the object should be cut in the object; and

a pressing step of pressing the object from the

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other end face side of the object.

7. A method of cutting an object to be processed, the method comprising:

5 a starting point region for cutting forming step
of irradiating a wafer-like object to be processed
which is made of a semiconductor material with laser
light while positioning a light-converging point within
the object under a condition with a peak power density
of at least 1×10^8 (W/cm²) at the light-converging
10 point and a pulse width of 1 μ s or less, so as to form
a modified region within the object, and causing the
modified region to form a starting point region for
cutting, deviated from a center position of the object
in a thickness direction thereof toward one end face of
15 the object, along a line along which the object should
be cut in the object; and

a pressing step of pressing the object from the
other end face side of the object.

20 8. A method of cutting an object to be
processed, the method comprising:

a starting point region for cutting forming step
of irradiating a wafer-like object to be processed
which is made of a piezoelectric material with laser
light while positioning a light-converging point within
25 the object under a condition with a peak power density
of at least 1×10^8 (W/cm²) at the light-converging

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point and a pulse width of 1 μ s or less, so as to form a modified region within the object, and causing the modified region to form a starting point region for cutting, deviated from a center position of the object in a thickness direction thereof toward one end face of the object, along a line along which the object should be cut in the object; and

a pressing step of pressing the object from the other end face side of the object.

9. A method of cutting an object to be processed, the method comprising:

a starting point region for cutting forming step of irradiating a wafer-like object to be processed which is made of a semiconductor material with laser light while positioning a light-converging point within the object, so as to form a molten processed region within the object, and causing the molten processed region to form a starting point region for cutting, deviated from a center position of the object in a thickness direction thereof toward one end face of the object, along a line along which the object should be cut in the object; and

a pressing step of pressing the object from the other end face side of the object.